Range Effectiveness Evaluations 2004

Part 1. An Evaluation of Range Use Plan Content in Four Forest Districts in British Columbia

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BRITISH COLUMBIA

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Background

The *Forest Practices Code of British Columbia Act* (Code) came into effect in June of 1995 and required range use plans (RUPs) for all *Range Act* agreements. Recommendations on plan content and a template were provided in a guidebook[1]. In September 2000, as a part of the Code streamlining initiative, substantial changes were made to legislation resulting in a restructuring of RUPs and a new guidebook and plan template[2].

Forest Practices Branch has carried out a number of informal RUP reviews and provided feedback to regions and districts since 1995. In 1996 Range Section staff and Crown Counsel reviewed a sample of RUPs and district templates. A memo (Appendix 1) to regional range officers detailed some of the problems identified in these plans and templates. The issues are still relevant today.

As a follow-up to the Code changes, a series of Rangeland Health Brochures was developed by the Forest Practice Branch, Ministry of Forests. Two of the brochures published in 2003 make new recommendations on range readiness criteria[3] and appropriate stubble heights[4] for upland and riparian plant species.

The *Forest and Range Practices Act* (FRPA) came into effect on January 31, 2004 bringing more changes to range plans. RUPs prepared under the Code were grandparented under FRPA and will remain in effect until December 31, 2005.

Project Objectives

Evaluate a selection of RUPs from four representative areas of the province to determine if current RUPs meet Code content requirements.

Methodology

Peace Forest District and Nadina Forest District in the Northern Interior Region (RNI) and 100 Mile House Forest District and Okanagan-Shuswap Forest District in the Southern Interior Region (RSI) were selected for this evaluation. These districts were chosen because they represent four of the significant regional landforms and vegetation types in British Columbia, and each district has significant numbers of range agreements and livestock grazing on Crown range.

All RUPs approved or given effect after December 31, 2000 in each district were reviewed and their content compared to the legislation in place at the time of the approval. There was an expectation that plans would follow the basic range use plan template in the October 2000 guidebook and meet the following content requirements:

- A map of appropriate scale with required boundaries, range developments and features
- A grazing schedule
- Measures to address the strategies provided by the district manager

[1] Range Management Guidebook. Second Edition. September 1995
[2] Range Use Plan Guidebook. October 2000.
[3] Using Range Readiness Criteria. Rangeland Health Brochure 5. 2003.
[4] Applying Best Stubble Heights on Rangelands. Rangeland Health Brochure 6. 2003

- Plant community descriptions in areas negatively affected or likely to be negatively affected by livestock grazing
- Key areas, including stubble height and range readiness criteria
- Browse use levels
- An indication of whether the district manager or the agreement holder[5] prepared the plan. This has implications on responsibilities for plan extensions[6], amendments[7], and public review and comment[8]. The Code also distinguishes between plans that are "given effect" by the district manager[9] and plans that are "approved" by the district manager[10]
- Legal enforceability.

Results

Okanagan-Shuswap Forest District

The restructured Okanagan-Shuswap Forest District comprises the former Vernon, Penticton and Salmon Arm Forest Districts and therefore has some differences in plan content and approach that reflect historical differences in people and expectations among the former districts. The district is divided into three zones as follows:

a) Vernon zone

A total of 135 plans were reviewed. All plans were "approved" by the district manager and are therefore assumed under the Code to be rancher prepared plans.

i) *Plan strengths*

- Vernon has high quality maps that show range developments, roads, colour–coded cutblocks, and important resource features.
- Grazing schedule dates are enforceable.

ii) *Plan weaknesses*

Plans do not consistently follow the RUP template from the October 2000 guidebook. There are significant weaknesses in plan content as follows:

- Plans continue to list tenure conditions that belong with the tenure document and have no relevance to the RUP[11]
- Plans continue to use words like "shall", "must" and "may" conveying instructions that are not in keeping with rancher prepared plans. Instead, rancher prepared plans should use "will" as it expresses a rancher's commitment to an action
- General utilization tables appear as appendices in most plans. These are redundant and often contradictory to stubble height and browse use levels listed in the body of

[5] *Forest Practices Code of British Columbia Act*, Section 27.
[6] *Forest Practices Code of British Columbia Act*, Section 27(6).
[7] *Forest Practices Code of British Columbia Act*, Sections 27(7) and 35(3).
[8] *Forest Practices Code of British Columbia Act*, Section 39 and the Operational Planning Regulation, Sections 7, 56, 57 and 58.
[9] *Forest Practices Code of British Columbia Act*, Section 40.
[10] *Forest Practices Code of British Columbia Act*, Section 41.
[11] Appendix 1 Memo on Range Use Plan Content

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the plans. This leads to inconsistency in interpretation and ultimately makes compliance and enforcement actions difficult

- The livestock management section has a table that appears to allow heavy to extreme use on 10% of each pasture. The same table sets a "moderate" level with a range of 36–60% use. Moderate should be no more than 50% on most native range, and in some cases no more than 25–30% on sensitive and early seral plant communities
- Measures for achieving properly functioning condition (PFC) in riparian areas are taken directly from the outdated *Riparian Management Guidebook* and are not properly stated as measures. Instead they are a mix of rules, instructions, and commitments
- Measures for timber regeneration are a mix of rules, instructions, and rancher commitments. It would be better to remove this section from the plan and refer to a district manager policy on livestock grazing in plantations. The Range Practices Regulation covers tree damage and removal of livestock from plantations, and therefore reference to this is redundant
- The requirement for maintenance of developments is in the act and regulations and therefore should not be included in the plan
- The requirement to consult should not be in the plan
- The lack of key areas is problematic. Key areas are intended to serve as monitoring sites that are indicative of the management unit. If chosen properly, they allow ranchers and ministry staff to quickly determine if an area is ready for grazing, and when livestock should be moved to the next pasture or removed from the range. Without defined key areas, the task of determining levels of utilization/stubble height is onerous and compliance and enforcement is difficult
- Where readiness criteria are stated in plans, monitoring areas are not defined
- The readiness criterion for pinegrass of 4 leaves is not reasonable since pinegrass on average produces about 3.25 leaves at full development
- Average stubble heights as stated in some plans are lower than those recommended in Rangeland Health Brochure 6 and Appendix 3 of the 1995 *Range Management Guidebook*. Several plans also confuse the issue by referring to nodding leaves in pinegrass and sedges as a stubble height criterion. Stubble heights of 8 cm on pinegrass, 13 cm on bluebunch wheatgrass and 8 cm on Idaho fescue may not be adequate to protect resource values
- No riparian issues are mentioned specifically in any plans
- Plans do not identify specific problem areas, or areas requiring remediation.

b) Penticton zone

A total of 49 plans were reviewed. Of these 46 plans were "approved" by the district manager and are therefore assumed to be rancher prepared plans. The remainder were "given effect" by the district manager and are therefore assumed to be ministry prepared plans. Plans generally meet legislation requirements, but there is considerable variation in plan quality. In 2001 and 2002, 16 plans were approved using the pre–streamlining format and legislation. Of these plans, eight were approved for 10 years, one was approved for five years and seven were approved for one year and continue as grandparented FRPA plans.

There are no plant community descriptions in 16 of the plans. The legislation requires plant community descriptions only in areas negatively affected or likely to be negatively affected by livestock grazing.

i) *Plan strengths*

- Maps are adequate and meet code requirements
- Grazing schedule dates are enforceable as written.

ii) Plan weaknesses

- Plans do not identify specific problem areas, or areas requiring remediation
- Plans generally do not identify key areas, but do have utilization/stubble height criteria. Where key areas were not specifically identified, the monitoring area was deemed to be the entire pasture. This makes evaluations onerous and compliance and enforcement difficult
- Readiness criteria, where used, are based on height (leaf length) that in some cases are very low (5–10 cm bluegrass, 10–15 cm bluebunch wheatgrass, 15 cm pinegrass). No criteria are listed for two significant and sensitive grass species, Idaho fescue or rough fescue
- Some plans still have words like "shall", "must" and "may" conveying instructions that are not in keeping with rancher prepared plans. Rancher prepared plans should use "will" as it expresses a rancher's commitment to an action[12]
- The utilization guidelines table from the 1995 *Range Management Guidebook* is still being used. In many cases the percentage use and stubble heights may not be adequate to protect resource values. For example, 50% use of rough fescue and bluebunch wheatgrass is considered high; 30% would be preferable, especially on recovering sites. Average stubble heights of 10–15 cm for bluebunch wheatgrass and 8 cm for pinegrass may also be too low to protect resource values
- Plans continue to rely on the outdated *Riparian Management Area Guidebook* criteria, rather than PFC as set out in the September 2000 regulation change
- No riparian issues are mentioned specifically in any plans.

c) Salmon Arm zone

A total of 14 plans were reviewed. Seven plans were "approved" by the district manager and are therefore assumed to be rancher prepared plans. The remainder were "given effect" by the district manager and are therefore ministry plans. Seven plans had no plant community descriptions. The legislation requires plant community descriptions only in areas negatively affected or likely to be negatively affected by livestock grazing.

i) Plan strengths

- Plans are concise and generally conform to the legislation and guidebook and follow the October 2000 template
- Maps are adequate

[12] Appendix 1 Memo on Range Use Plan Content

- Key areas have been selected for each pasture unit, and there are stubble height guidelines for each. Stubble heights generally conform to the 1995 *Range Management Guidebook* recommendations.
- The grazing schedules dates, readiness criteria and stubble heights are enforceable as written.

iii) Plan weaknesses

- Readiness criteria are limited to soil moisture conditions and do not include plant phenology.
- No riparian issues are mentioned specifically in any plans.
- Plans do not identify specific problem areas, or areas requiring remediation.

Nadina Forest District

This district comprises the former Lakes and Morice Forest Districts. A total of 28 RUPs were reviewed.

From 2001 to 2003, 10 plans were approved using the pre–streamlining format and legislation. Of these plans, one was approved for 10 years, two were approved for four years, and seven were approved for two years and they continue as grandparented FRPA plans. These plans do not fully meet the Code content requirements for maps, measures, key areas, plant communities and reference to PFC.

Only four plans were approved during 2002 following the October 2000 template. These plans, with the exception of the map, meet Code content requirements.

There was confusion over the transition provisions of the Code[13] and FRPA[14] respecting grandparented plans. Plans in effect at the time of the Code amendment in 2002 were grandparented through the 2005 grazing season, unless the respective range agreement expired and was not replaced. There are two circumstances requiring a new plan: (1) the old plan had lapsed prior to the 2002 Code amendment and (2) a range vacancy resulted in a new range agreement.

During January, 2004, 14 plans were approved prior to FRPA implementation and finalization of the Range Planning and Practices Regulation. These plans follow the pre–streamlining format and do not meet full Code content requirements. According to district staff these plans were approved for the 2004 grazing season as part of tenure renewal/replacement packages and were intended as a bridge. They will be replaced by new rancher prepared plans for the 2005 grazing season. Although new plans were unnecessary, once the decision was made to prepare them, there was an obligation[15] to bring them up to the Code streamlining standard.

It appears that all plans were prepared by ministry staff, although only four plans indicate that they were "given effect".

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[13] Forest Practices Code of British Columbia Act, Section 27(8).
[14] Forest and Range Practices Act, Section 205.
[15] Forest Practices Code of British Columbia Act, Section 40 and 41.

i) Plan strengths

- Four plans written for the 2002 grazing season follow the October 2000 plan template
- Plans have range readiness criteria, stubble heights, browse use levels and grazing schedules
- The grazing schedule dates are enforceable.

ii) Plan weaknesses

- Maps are "Schedule A" maps from tenure documents and do not show range developments and resource features as required in regulation
- Plans lack key areas. Key areas are intended to serve as monitoring sites that are indicative of the management unit. If chosen properly, they allow ranchers and ministry staff to quickly determine if an area is ready for grazing, and when livestock should be moved to the next pasture or removed from the range. Without defined key areas, the task of determining levels of utilization/stubble height is onerous, requiring extensive sampling; and compliance and enforcement is difficult
- For the 2004/05 grazing season, 14 plans were prepared that do not follow the October 2000 template
- From 2001 to 2003, 10 plans were approved that did not follow the October 2000 plan template
- "Must" and "shall" clauses appear throughout the plans telling the agreement holder what to do, rather than stating a commitment to an action on their part[16]
- The special conditions/obligations section is a list of tenure conditions and therefore belongs with the tenure document, not the plan[17]. Similarly the salting guidelines appendix is a district manager policy that could be referred to, but should not form part of the plan itself
- There are no specific measures, instead there is a livestock management section that describes use
- The stubble height criteria of 3 cm for bluegrass and creeping red fescue, and 7–10 cm on native species is probably too low to protect resource values. In perspective, 3 cm is about the width of an average thumb.
- There are no plant community descriptions in most plans. Information is based on ministry forest cover maps. The legislation requires plant community descriptions only in areas negatively affected or likely to be negatively affected by livestock grazing
- No riparian issues are mentioned specifically in any plans and there are no measures addressing PFC
- Plans do not identify specific problem areas, or areas requiring remediation
- Existing and proposed development sections remain in plans but have not been required since September 2000. The requirement for maintenance of developments is in the act and regulations and therefore should not be included in the plan.

[16] Appendix 1 Memo on Range Use Plan Content
[17] Appendix 1 Memo on Range Use Plan Content

Peace Forest District

This restructured district comprises the former Fort St. John and Dawson Creek Forest Districts. A range evaluation was conducted in Dawson Creek Forest District in 2001, so this evaluation considered only those RUPs in the Fort St. John zone. Sixty- seven RUPs were reviewed and found to be consistent with legislation.

i) Plan strengths

- The district keeps an inventory file having detailed plant community descriptions, photos and monitoring data for each range agreement. These monitoring sites serve as the key areas for individual pastures. This is an excellent way of keeping the RUP simple and concise, without losing important plant community information
- All plans were rancher prepared, follow the October 2000 template and are concise and straight forward
- Plans have maps, measures, plant community descriptions, stubble heights, readiness criteria, browse use levels
- The grazing schedule dates, range readiness criteria and utilization levels are enforceable.

ii) Plan weaknesses

- Three plans lacked any plant community descriptions. The legislation requires plant community descriptions only in areas negatively affected or likely to be negatively affected by livestock grazing
- Two plans lacked stubble height criteria
- No riparian issues are mentioned specifically in any plans
- Plans do not identify specific problem areas, or areas requiring remediation.

100 Mile House Forest District

A total of 119 plans were reviewed. Of these, 57 were post-streamlining plans. All new plans generally meet the legislation content requirements and use the template from the October 2000 guidebook. Plans are concise. All plans are rancher prepared.

i) Plan strengths

- The term "key area", does not appear in any plans. However the district has designated "special management zones" in each pasture that function as key areas
- Maps comply with legislation requirements
- Grazing schedule dates, range readiness criteria and utilization levels are enforceable as written.

ii) Plan weaknesses

- Stubble heights of 8 cm for pinegrass, orchardgrass, 12 cm of bluebunch wheatgrass, and 5–7 cm for bluegrasses may be too low to protect resource values
- One plan used a "shall" clause inappropriately
- No riparian issues are mentioned specifically in any plans.

Recommendations

1. Range staff and Compliance and Enforcement staff should review RUP submissions to ensure enforceability before they are submitted to the district manager for approval.
2. Plans should have key areas or other identifiable monitoring sites.
3. Plans should follow recognized templates from approved guidebooks.
4. Plans should not include tenure conditions.
5. Plans should identify specific problem areas, or areas requiring remediation.
6. Detailed plant community descriptions and monitoring data should be kept on file for each range agreement. This will insure that useful information in not lost as RUP content changes over time.
7. Districts should consider developing district manager range policies for tenure conditions, fence maintenance standards, salting practices, livestock use of cutblocks, forage seeding, etc. These policies could then be referenced in RUPs without attaching them as appendices.

Appendix: May 23, 1996 Memo on Range Use Plan Content

File: 10194-06/RUP

May 23, 1996

To: Regional Range Officers

From: Doug Fraser
Senior Range Practices Agrologist
Range Section

Re: Sample range use plans and templates

A number of districts have developed sample range use plans and detailed range use plan templates which will serve as building blocks for other range use plans. Recently Range Section staff met with Spencer Manning to discuss range use plan content requirements and the type of detail that might be reasonable in a template or typical plan. The following are general impressions from our working group and should be considered as you prepare or modify range use plan templates in your regions.

The concept of a range use plan template is good. Use of a basic template will ensure that elements required by the Operational Planning Regulation are addressed in an orderly and consistent manner in each plan. However, the template should be left generic enough to allow for site specific management.

The sample plans and templates we reviewed represent good and substantial efforts on the parts of the writers. However, it is our impression that the level of detail in many plans and templates implies a level of knowledge and management which are unachievable. Plans with great detail and many restrictive clauses are those most likely to be challenged. A rule of thumb is to keep plans simple but adequate to address the real issues. Plans should be readable and understood by range agreement holders in principle, the agreement holder should prepare the second generation plan.

Several sample plans have gone to great detail in describing current plant communities (up to 14 pages in one plan), but have glossed over the resource values and livestock management sections. This in our opinion is an improper focus. By all means describe the major plant communities in reasonable detail, but don't forget that the plan must show how the management of livestock will integrate with other values and uses.

Several templates and sample range use plans use words such as *"must"* and *"shall"* repeatedly. These terms convey instructions to the range agreement holder which are not in keeping with the Code. The range use plan is an agreement between the agreement holder and the district manager, therefore the word *"will"* is more appropriate than *"must"* or *"shall"* because it conveys the concept of two parties agreeing to an action. This error will be corrected in the sample plan in the Range Management Guidebook.

In several templates and range use plans, the writers have restated requirements which already exist in regulation (e.g. the requirement to maintain developments is in Section 5 of the Range Practice Regulation the requirement to remove dead livestock from a riparian area within a community watershed in is Section 7(4) of the RPR). There are two problems with this: 1) an agreement holder or a judge may look at the range use plan and assume that it contains a definitive list of dos and don'ts, and therefore if something isn't listed, it doesn't exist 2) an amendment to the regulation might leave plans with dated or incorrect clauses which would require amendments. A better approach might be to advise agreement holders of these requirements through a District Policy which could be updated as required without amending each range use plan.

Several plans seem to merely restate *all* recommendations from the Biodiversity, Riparian and Range Management Guidebooks. The guidebooks are supposed to provide guidance in setting objectives, developing strategies and preparing meaningful plans based on each circumstance. A cookbook approach does not convey that we are looking at each circumstance and developing appropriate management plans. This is critical in satisfying Section 41(1)(b) of the Code Act. In Spencer's opinion, a cookbook approach to planning will inevitably lead to legal challenges.

Target utilization levels in some cases do not allow for small patches of overuse which are unavoidable. It would be more reasonable to state an average or overall utilization level. Also, the list of indicator species should be kept down to a reasonable length. Listing several dozen "key" indicator species is misleading.

Special conditions that are related to eligibility, and not to range use do not belong in a range use plan. These conditions belong with the Range Agreement or in a District Policy. (e.g. the requirement to over-winter 80% of authorized livestock on appurtenant lands the requirement to remain commensurate the requirement to cooperate with other users etc.)

Generally the only appendix that needs to be included is one containing referral/review comment and how they were addressed (OPR Section 6(3)). Don't include, as appendices, lists of identified wildlife, district weed plans, CRMPs, or glossaries of range terms. These documents exist elsewhere and merely add to the thickness of the plan.

We recognize that there are several errors and inconsistencies in the Range Management Guidebook, and it is our intention to revise it next winter. I am keeping a file of required corrections and welcome your comments at any time. We hope that this memo will provide useful instructions in the interim. Please circulate it to the districts in your region.

Doug Fraser
Senior Range Practices Agrologist
Range Section

c.c. Ken Balaski
Earl Jenson
Spencer Manning